Appendix D

REASONABLE FORESEEABLE DEVELOPMENT: COMPRESSION EMISSIONS ASSOCIATED WITH OTHER NEPA PROJECTS (POST-1998)

Reasonably Forseeable Development (RFD) - Compression Emissions Associated with Other NEPA Projects (Post-1998)

	Other EIS Sources	Compression			Stack Parameters					X	Y	Z
		Compression	NO_x Emission Factor (g/hp-hr)	Emissions TPY	H (m)	D (m)[6]	T (K)	V (m/s)	Q (m^3/sec)		(km)	
L-1	Fontenelle Reservoir	13,692 [1]	1.5	198	7.32	0.86	765.93	80.77	47.15	-113.3	-49.34	2025
L-2		13,692 [1]	1.5	198	7.32	0.86	765.93	80.77	47.15	-105.62	-57.01	1960
M-1	Moxa Arch	17,066 [2]	1.5	247	7.32	0.96	765.93	80.77	58.77	-120.33	-88.03	1980
T-1	Continental Divide/Wamsutter II[5]	10,000 [3]	1.5	145	7.32	0.74	765.93	80.77	34.44	-0.4	-77.83	2100
T-2		10,000 [3]	1.5	145	7.32	0.74	765.93	80.77	34.44	16.55	-99.89	2125
T-3		10,000 [3]	1.5	145	7.32	0.74	765.93	80.77	34.44	41.51	-75.27	2060
T-4		10,000 [3]	1.5	145	7.32	0.74	765.93	80.77	34.44	-3.91	-114.8	2100
T-5		10,000 [3]	1.5	145	7.32	0.74	765.93	80.77	34.44	24.92	-75.93	2050
T-6		20,000 [3]	1.5	290	7.32	1.04	765.93	80.77	68.88	-8.13	-95.48	2100
AA-1	South Baggs	3,000 [4]	1.5	43	7.32	0.40	765.93	80.77	10.33	60.8	-160.61	1950
AB-1	Jack Morrow Hills	3,480	1.5	50	7.32	0.43	765.93	80.77	11.98	-38.22	-42.48	2270
	Total	120,929	1.5	1,752								

	Other EIS Sources	Gas Plant Emissions (tons/year)[7]			
		$PM_{2.5}$	PM_{10}	NOx	SO_2
T	Continental Divide/Wamsutter II [5]	2.00 [8]	2.00	16.70	0.00

[1] Fontenelle expected compression (from Continental Divide EIS) is 28,600 hp. The compression already permitted (CT-1125, CT-1300, and CT-1309) totals 1,216.8 hp.

[2] Moxa Arch expected compression (from Continental Divide EIS) is 28,770 hp. The compression already permitted (CT-1174 and CT-1175) totals 11,704 hp.

[3] Compression is in six locations - five 10,000 hp compressors and one 20,000 hp compressor.

[4] Provided by TRC - telephone call - March 5, 1999.

[5] Continental Divide has a gas plant co-located with the 20,000 hp compression site. Emissions are quantified below.

[6] Stack parameters are not available for each compressor. The diameters are calculated by assuming that the exhaust flow rate is proportional to the horsepower output of the engine. Values are based on a 3,335 hp compressor with 24,336 acfm exhaust flowrate.

[7] Emissions provided by TRC, e-mail dated 3/9/99. Assume that all gas plant emissions exit through the 20,000 hp compressor stack.

[8] Assume that all PM10 is PM2.5.